

WHAT IS CLAIMED IS:

1. A method for treating a slurry type organic waste to produce a liquid fertilizer,  
the method comprising the steps of:

5        Adding the aerobic thermophilic digestion bacteria into a closed treatment tank,  
the tank accommodating an organic wastes slurry;

Aerating the treatment tank, for promoting a proliferation of the aerobic  
thermophilic digestion bacteria;

Treating the organic wastes slurry with a thermophilic fermentation; and

10       Adding photo-tropic bacteria so as to convert the organic waste slurry into a liquid  
fertilizer.

2. The method for treating a slurry type organic waste as claimed in claim 1,  
wherein nutrients for the microbes are added into the treatment tank in addition to the  
15       aerobic thermophilic digestion bacteria and the photo-tropic bacteria.

3. The method for treating a slurry type organic waste as claimed in any one of  
claims 1 and 2, wherein a microbe proliferation-inhibiting means is operated after the  
fermentation treatment.

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4. The method for treating a slurry type organic waste as claimed in any one of  
claims 1 to 3, wherein the slurry type organic waste are made by adding the water into  
the organic waste which have the low water content.

5. The method for treating a slurry type organic waste as claimed in any one of claims 1 to 3, wherein the microbe proliferation-inhibiting means consists of a pH-adjusting agent

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6. The method for treating a slurry type organic waste as claimed in claim 5, wherein the pH of the treated material is adjusted to over 10 or to below 3 by the pH-adjusting agent.

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7. An apparatus for treating a slurry type organic waste to produce a liquid fertilizer, the apparatus comprising:

A closed treatment tank for accommodating the slurry type organic waste;

A group of microbes comprising photo-tropic bacteria and aerobic thermophilic digestion bacteria;

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Means for putting the microbes into the closed treatment tank; and

Oxygen supply means for supplying oxygen into the closed treatment tank.

8. The apparatus for treating a slurry type organic waste as claimed in claim 7, further comprising: means for supplying nutrient for a microbe and/or pH-adjusting agent.

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9. The apparatus for treating a slurry type organic waste as claimed in any one of claims 7 and 8, further comprising: means for removing foams formed within the treatment tank.

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10. The apparatus for treating a slurry type organic waste as claimed in any one of claims 7 and 8, further comprising: means for heating the contents of the treatment tank.

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